

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted from the academic year 2025 – 2026)

B.Sc. DEGREE EXAMINATION, APRIL 2026
BRANCH VI.A. – ADVANCED ZOOLOGY AND BIOTECHNOLOGY
SECOND SEMESTER

COURSE : ELECTIVE
PAPER : GENERAL BOTANY II
SUBJECT CODE : 25BT/ME/GB22
TIME : 3 HOURS **MAX. MARKS: 100**

SECTION A		CO	KL
Q. No.	ANSWER IN A SENTENCE (8 X 2 = 16)		
1	Define prothallus.	1	1
2	What is transfusion tissue? Where it is present?	1	1
3	Differentiate endarch and exarch xylem.	1	1
4	Define Meristematic tissue.	1	1
5	Mention any three growth hormones present in plants.	1	1
6	Recall the photolysis of water.	1	1
7	List the branches of horticulture.	1	1
8	What is stock and scion in Grafting?	1	1
SECTION B		CO	KL
Q. No.	ANSWER THE FOLLOWING IN 50 WORDS (8 X 3 =24)		
9	Differentiate dorsiventral and isobilateral leaf.	2	2
10	Illustrate monoxyletic wood.	2	2
11	Differentiate simple and complex tissue.	2	2
12	What is facilitated diffusion?	2	2
13	Differentiate Urostachya leaves and Rhophalostachya leaves in <i>Lycopodium</i> .	2	2
14	Define photoperiodism.	2	2
15	Comment on leaf cutting.	2	2
16	What is floriculture?	2	2
SECTION C		CO	KL
Q. No.	ANSWER ANY <u>FOUR</u> OF THE FOLLOWING IN 500 WORDS. (4 X 5 =20)		
17	Illustrate the strobilus of <i>Lycopodium</i> .	3	3
18	Explain the structure of Stomata.	3	3
19	Enumerate the physiological effects of gibberellins.	3	3
20	Analyse the active transport with example	3	3
21	Explicate the Bonsai technique.	3	3
SECTION D		CO	KL
Q. No	ANSWER ANY <u>TWO</u> OF THE FOLLOWING IN 1000 WORDS. DRAW DIAGRAMS WHEREVER NECESSARY. (2 X 10 =20)		
22	Explain the life cycle of <i>Funaria</i> .	4	4
23	Summarise the role of micronutrients in plants.	4	4
24	Analyse the mechanism of photoperiodism.	4	4

Q. No.	SECTION E ANSWER ANY <u>TWO</u> OF THE FOLLOWING IN 1000. WORDS. DRAW DIAGRAMS WHEREVER NECESSARY. (2 x 10 = 20)	CO	KL
25	Elucidate the sporophytic stage of <i>Cycas</i> .	5	5
26	Delineate the dark reaction of photosynthesis.	5	5
27	Substantiate the types of layering methods in vegetative propagation.	5	5
